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Maxwell Stolarski* (mstolarski@math.utexas.edu). *Ricci Flow on Doubly-Warped Products*. Preliminary report.

I will discuss aspects of the Ricci flow on multiply-warped products with a focus on doubly-warped products of Einstein manifolds with positive scalar curvature and the dynamics of the flow near finite-time singularities. In this case, previous work on the Ricci flow on singly-warped products and the mean curvature flow of $SO(p) \times SO(q)$ invariant hypersurfaces have relevance, but the Ricci flow on multiply-warped products presents additional analytic difficulties. The geometry of certain non-compact Ricci-flat spaces asymptotic to Ricci-flat cones and their role in the dynamics will also be discussed. (Received September 25, 2017)